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This review summarizes research on gifted students reported during a 3-year period (1960-62). Consideration is given to three major topics: (1) characteristics and identification of the gifted, (b) curriculum developments and adaptations, and (c) general developments. Bibliography includes approximately 85 titles.

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CHAPTER VI

The Gifted

JACK W. BIRCH and MAYNARD C. REYNOLDS *

THIS CHAPTER covers a three-year period following the report by Fliegler and Bish in the December 1959 REVIEW. Its orientation is limited primarily to research and theory, with selective emphasis on quantitative studies. Information about courses of study, descriptions of school programs, books in the field, and other material of value has necessarily been restricted. Space limitations make it impossible even to include reviews of all significant research.

A number of bibliographies have appeared since 1959, the most complete and helpful being that of Gowan (1961). Gowan's work contains annotations indicating which entries report research. It also includes both a topical index and a subject index as well as reports of Gowan's view of current emphases. It lists books, pamphlets, and organizations.

Carriker and Asher (1960) reviewed the 27 research projects on children with special abilities supported by the Cooperative Research Program of the U.S. Office of Education between 1956 and 1960. They briefly described each by title, presented conclusions, and categorized them under the following headings: identification and development, classroom organization and special procedures, and achievement and motivation.

Anderson (1961) edited a bulletin that is also a useful guide to literature and research trends in the field. Another important and selective overview of research on the gifted child was Carter's (1960) contribution to the *Encyclopedia of Educational Research.*

No attempt has been made to formulate a special definition of giftedness for purposes of this chapter. Conceptions of the nature of talent are changing and expanding rapidly. More studies than previously are being directed toward the understanding of special talents. New approaches are being made to analyses of cognitive processes, and attention to noncognitive determinants of ability is increasing.

In this chapter, consideration is given to three major topics: (a) characteristics and identification of the gifted, (b) curriculum developments and adaptations, and (c) general developments.

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* The chapter represents a condensation of a much longer offset report that was prepared by the authors. A limited number of copies of that report and of dittoed sets of additional bibliographic material are available on a loan basis. Requests should be directed to the authors.

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Characteristics and Identification of the Gifted

Economics of Talent

Identification of persons who have potentialities for outstanding performance should not be isolated from consideration of provisions made for the development of talent. Human beings have varying potentialities according to the situations in which they develop and live. In very recent years, this theme has been elaborated in several forms. McClelland (1961) extended his now familiar work on achievement motivation to a conception of the "achieving society." Injecting a controversial note, Hagen (1962) proposed a markedly different theory of social change and economic development. Hagen's theory involves a cycle beginning with disruption of traditional societies by events that result first in withdrawal of status respect for minority groups and then in retreatism. Although such a withdrawal reaction may continue for several generations, it finally produces a period of high creativity. The volume edited by Lipset and Lowenthal (1961) took a look at theories propounded on similar topics a decade before by Riesman (1950) in *The Lonely Crowd*.

These studies reflected the growing alliance between economics and education, the increasing attention to subtle determinants of ability, and the growing appreciation that high ability is in large part a social product as well as a social resource. The important volume edited by Halsey (1961), which reported on a manpower problem conference of the Organization for Economic Cooperation and Development, speaks eloquently of these trends.

The impact of talent loss upon the socioeconomic welfare of the community because of the well-established fact of nonentry of a high proportion of the gifted into higher education would seem to be great indeed. Little attention has been paid to the related problem of dropout of gifted young adults in college.

Little (1959) demonstrated substantial further loss of talent for reason of failure on the part of many high-ability students to complete college work. Little followed 1,949 high school graduates who entered the University of Wisconsin in 1953. Persistence in university studies was related to high school rank and to mental ability. He found that the percentage of loss of top-ranking students, after they entered the University, was roughly equal to that of such students who failed to enter college.

Additional References: Andrew and Stroup (1960); Flanagan (1961); Stalnaker (1961).

Intellectual Characteristics

Interest in research using traditional intelligence tests to characterize and to identify the gifted has been generally languid. However, a few studies of this type were noteworthy.

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Gallagher and Lucito (1961) found that gifted, average, and retarded subjects had different subtest patterns on the *Wechsler Intelligence Scale for Children*. They speculated that different patterns of curriculum and methods of teaching should be used to reflect the varying patterns of intellectual abilities.

As part of a research effort to find means for early identification of scientific talent, Davis and others (1960) have produced two forms of the Hunter Science Aptitude Test. It is an individually administered multiple aptitude test to be used with children of school-entering and elementary school age. Scores are provided on knowledge of science, space conceptualization, vocabulary, numeric ability, and reasoning.

One of the most promising programs of research was that of Kagan, Moss, and Sigel (1960). They reported methods of analyzing performance on tests of cognitive ability from which they derived classifications and measures of "cognitive style" or "conceptual style." Still at an exploratory stage, this work would seem to represent one of the areas of study likely to be in the forefront of research during coming years. It could reveal links between cognitive processes and personality variables that would serve to reorient much current thinking about the development of children.

Additional References: French (1959); Hone (1959).

Personal and Social Characteristics

Smith (1962) presented a useful review and evaluation of research on personal and social characteristics of the gifted as well as a significant study in these same areas. He pointed out that comparisons of the gifted with "normal" subjects can easily be confounded by the presence of socioeconomic, educational, religious, and other differences. Smith compared superior and average adolescent groups (each consisting of 42 students) that had been matched on social class status, chronological age, sex, religion, and nationality background. The superior were those who tested between the ninety-fifth and the ninety-ninth centiles on a group intelligence test; the average tested between the twenty-fifth and the seventy-fifth centiles on the same test. Procedures for assessment of personal and social characteristics were developed with unusual care.

The only clear difference found between the two groups was higher prevalence of interpersonal traits of independence and dominance among the gifted. No consistent differences were found on behavior judged to be responsible and cooperative. However, the teachers perceived the gifted as "more aggressive and rebellious," a characteristic recently attributed to highly creative persons but rarely to a high-IQ group. No significant differences were observed on other characteristics.

Smith concluded that generalizations about the personal and social characteristics of the gifted are "hazardous" and that no "inevitable associations" between high IQ and other characteristics have been demonstrated.

Increasingly, attention is turning to the interaction of cognitive abilities, personality characteristics, and more general variables reflecting values and social structure. As suggested by Smith, it may be of little value to undertake further studies of those with high IQ's without consideration of such sociopsychological variables.

Coleman's (1960, 1961) study of adolescent culture in Midwest high schools presented a worrisome picture of values and aspirations of the adolescent population. His data, collected immediately before the Sputnik era, told a story of adolescent society organized around high school activities and connected only by a thread to adults of the community. Success in athletics surpassed intellectual promise and physical beauty overshadowed achievement as status gainers for boys and for girls, respectively. Coleman expressed concern that the high schools presented too little challenge and excitement in intellectual spheres and then proposed a strategy to change this situation.

Warren and Heist (1960) studied 659 men and 259 women drawn from the 1956 National Merit Scholarship winners and near winners in order to identify personality characteristics of the gifted. Comparisons were made with undergraduate students at the University of California and Michigan State University. The scholars differed from the comparison groups on a wide variety of measures. They showed no greater incidence of maladjustment as judged by results on the *Minnesota Multiphasic Personality Inventory;* they revealed what was interpreted to be greater originality, imagination, inventiveness, and resourcefulness; and they tended to value a theoretical and aesthetic rather than an economic or utilitarian orientation. The direction of these results was not unexpected in view of many essentially similar findings from the pioneering work of Terman and others.

Lessinger and Martinson (1961) used the *California Psychological Inventory* with gifted students at both junior and senior high school levels and found that both groups displayed accelerated personal and social maturity. Intellectually gifted students who are also advanced in personal and social maturity may find more than the usual difficulty in peer group affiliation because their typical age-grade classmates are generally less mature.

In order to study feelings of isolation by the gifted and to obtain adult and peer observations concerning isolation of the gifted, Sheldon (1959) subjected a sample of 28 highly gifted children under 12 years of age to psychological assessment, psychiatric interviews, sociometric evaluation, and other observations. The considerable isolation observed was viewed not as a necessary concomitant of high intelligence but in relation to probable factors in the home and school. Further research on the discrepancy between isolation felt by the gifted and the opinions of peers about isolation was indicated.

Havighurst and others (1962) presented an account of the growth of a group of children during the immediate post World War II decade. Beginning with a group of sixth grade pupils in a Midwestern city of 45,000 population, the investigators followed them through adolescence to their

early adult years. High intelligence, acceptance by others, membership in a middle class family, and high family social status were found to be highly related to growth and to chances of gaining a high rating on initial adult adjustment.

In a study of 78 superior ninth grade students, Mueller and Rothney (1960) found that students did not predict accurately how their parents perceived them in eight personality characteristics, social behavior, and abilities. Teachers were inaccurate in estimating how students would rate themselves. The study was interpreted as indicating the need for help by counselors in creating better understanding among teachers, parents, and gifted students.

Additional References: Alozery and Meyerand (1960); d'Heurle, Mellinger, and Haggard (1959); Grooms and Endler (1960); Holland (1959a, b; 1960); Jensen (1958); O'Shea (1960); Watson (1960).

Creativity

Research on creative talent has gone forward rapidly on a broad front. The work of Guilford (1959), mainly with adults, and of Getzels and Jackson (1962), mainly with adolescents, has been carried down to the elementary school level by Torrance (1962). In much of the recent work, the interaction of background variables and of personality characteristics with cognitive processes has been emphasized. A major effort to influence educators to be more concerned with the identification and development of the innovating, nonconforming individual as contrasted with the more traditional emphasis upon conserving, conforming behavior has been much in evidence.

Much attention has been given to the development of instruments for identification of creative talent. Validity studies are much needed, as indicated in the recent University of Utah national conferences on the identification of creative scientific talent (Taylor, 1959).

Some work has been done on the development of creative ability as plotted against age (Torrance, 1962). Torrance suggested that there may be "slumps" at about ages 5, 9, and 12 years. Crosscultural studies have indicated that the 9-year or fourth grade "slump" which is not inevitably associated with age may be a function of subtle cultural and social influences.

Getzels and Jackson (1960) found that high IQ adolescents usually desired qualities for themselves that they believed would contribute to adult success. They tended to choose the common professions as preferred goals. Highly creative adolescents, in contrast, were inclined to seek unusual careers. This linkage between types of cognitive functioning and types of career aspiration makes it clear that keeping traditional IQ and creativity concepts separate may be useful.

On the other hand, Simpson and Martinson (1961) summarized some of the findings from the California studies to conclude that use of the intelli-

gence quotient as an identification criterion also locates individuals of great variety and virtuosity. They presented data which bring into question the view that use of intelligence tests in identification will produce a concentration of persons narrowly oriented toward conforming academic excellence.

MacKinnon (1960) described methods used at the University of California for basic research into characteristics of the effectively functioning person. He describes a syndrome of creativity, including such aspects as (a) his self-image as a respectable person, (b) his sense of destiny about self, (c) his openness to experience, (d) his struggling toward reconciliation of opposites, (e) his seeking to tolerate increasing tension while striving for creative solutions to ever more difficult problems for themselves, and (f) his high orientation to aesthetic and theoretical interests and values.

Suchman (1960, 1961) developed methods of what he terms "inquiry training" for elementary school children. Representing a specific effort to influence cognitive processes of children, the method involves use of brief demonstrations of experiments presented quickly by film in the classroom. Attention then shifts to processes of inquiry in which children ask questions of the teacher. Children are taught methods of systematic analysis of episodes which hopefully will increase the probability of correct leaps to explanation.

Additional References: Anderson (1959); Barron (1958); Bereiter (1960); Rivlin (1959).

Achievement, Underachievement, and Achievement Motivation

Starting with 144 eleventh and twelfth graders with IQ's over 110, half being achievers and half being underachievers, Shaw and McCuen (1960) found significant evidence of differences in achievement in school records for the boys back to the third grade and nonsignificant differences in the same direction back to the first grade. For girls, the significant differences extended back to the ninth grade, with nonsignificant differences running back to the sixth grade. This well-conceived retrospective investigation suggested the chronicity of underachievement and the need for looking to the earlier-than-high-school years for its predisposing factors.

Using the Sarbin Adjective Check List, Shaw, Edson, and Bell (1960) produced signs of differences in self-concept between achieving and underachieving bright high school students. Achieving boys saw themselves as stable, realistic, and intelligent. Underachieving boys revealed more negative feelings. Achieving girls rated themselves as ambitious and responsible. Underachieving girls were ambivalent in feelings toward self.

Frankel (1960) compared 50 pairs of achieving and underachieving boys, all of high intelligence, at New York City's Bronx High School of Science. Achievers were superior in mathematical and verbal aptitudes.

Underachievers tended to show interests in mechanical and artistic areas. A higher proportion of fathers of the achievers than of the underachievers were in high occupational groups. In addition to being less conforming and less happy about school, the underachievers had poorer school attendance records. Factors producing underachievement seemed to have been in operation early in the careers of the students.

Krugman and Impellizzeri (1960) described the important work, involving a variety of approaches, going forward in New York City schools to identify, to guide, to motivate, and to educate gifted students at all levels. The problem of underachievement received major attention.

Gowan and Scheibel (1960) demonstrated a high correlation between reading ability and achievement in college, even when intelligence was held constant. They reported that many gifted children were seriously deficient in reading skills. McCracken (1960) reported favorable results from a three-week training program in reading for gifted sixth grade children. Both rate and comprehension in reading were increased. It was concluded that methods of speed reading can be taught as early as the sixth grade.

Stamatakos and Shaffer (1959) reported on a study of the influence of recognition and special attention on achievement of superior college freshmen. Several groups of students were formed and received varying amounts of attention ranging from none up to a combination of special lecture programs, special banquets, letters of welcome from the dean of students, monthly counseling interviews, and distribution of a series of reprinted articles. No significant difference was observed among the groups in academic behavior. The authors concluded that their results cast doubt on earlier conclusions about methods of stimulating superior achievement.

Thistlethwaite (1959) compared two groups of certificate merit winners in the National Merit Scholarship program. One group had been given more recognition than the other. In this instance, the research showed positive effects of recognition, especially in increased favorableness of attitude toward intellectualism by students given special notice for outstanding intellectual ability.

Additional References: Diener (1960); Goldberg and Passow (1958); Michael, Jones, and Trembly (1959).

Curriculum Developments and Adaptations

Large-scale efforts to try out curriculum adjustments have been in progress, and some have been reported in detail. The results of field testing and of demonstrating a variety of public school educational provisions for children with a tested IQ of 130 and higher were reported by Simpson and Martinson (1961) for the California State Department of Education. Seventeen somewhat different administrative and instructional approaches, including acceleration, special grouping, and special attention in the regular

class, were associated with higher levels of achievement than those levels with which the procedures in the matched-pupil controlled groups were associated. None of the special educational procedures, from regular class special assistance or special groups to acceleration, produced any decrement in numbers of friendships or status level of the 929 pupils who participated. There were gains in personal-social attributes concomitant with some of the special educational procedures. This was a very significant investigation regarding educational administration and instructional procedures.

In a study of highly gifted children in regular elementary school classes, Gallagher and others (1960) concluded that it would be extremely difficult for regular classroom teachers to make necessary modifications in instruction for gifted children except when extraordinary effort was made to provide supplementary resources, such as expert consultation and psychological services.

Wrightstone (1958) presented data in a progress report on discovering and stimulating talented but culturally deprived youth through curriculum adjustments and counseling. The findings to date justified optimism regarding the investigation's potential contribution to knowledge regarding how special guidance, instruction, and cultural enrichment could influence educational goals and accomplishments in mentally advanced students from limiting environments.

Additional Reference: Alpren and Hohenstein (1960).

Community and Parental Attitudes Toward Special Education for the Gifted

In an analysis of the attitudes of 989 parents, 524 teachers, and 618 junior and senior high school children, Hamilton (1960) concluded that the arrangements for gifted children in the public schools of Portland, Oregon, were highly approved. Because of the emphasis given in Portland over the past several years to the systematic development of special education for the gifted, it was particularly important to have this assessment of the community response. The design of the investigation allowed comparisons between groups who had experienced programs for the gifted and those who had not.

Parents, teachers, and children overwhelmingly approved special programs for the gifted in the schools. They were inclined toward a broad program. They favored naming the classes in terms of the type of work done rather than in terms of the identity of the children who attended. The degree of favorableness of parents, teachers, and children toward special programs was positively related to familiarity, proximity, and involvement in successful programs. Recommendations were included on how to introduce and to conduct special education for mentally advanced children in a community.

Additional measures of community reaction are needed, both for evaluation and guidance. Since parents, employers, and institutions of higher education would be expected to have important opinions about the consequences of special education programs, their views should be regularly solicited in order that they might be used in program improvement.

Ability Grouping

Passow and Goldberg (1962) reported a number of studies of ability grouping conducted under auspices of the Talented Youth Project. One of these investigations, reported only in preliminary form, was probably the most extensive experimental study ever conducted in this field. It involved organizing 86 fifth grade classes of 45 elementary schools according to various ability-range patterns. Pupils were held in the specially arranged classes for two school years. Complete data were available for about 2,200 pupils.

Pupils were first divided into five levels of IQ, in terms of scores on a group intelligence test. Classes were then formed according to 15 different patterns of ability levels. Some classes included pupils of only a single level; others consisted of pupils of two contiguous levels; and others of three or even more levels. No effort was made by the experimenters to influence or even to investigate classroom procedures.

Although a variety of pretests and posttests was used, only achievement test results have been reported. In general, having gifted children in classes with other children did not have a facilitating effect on the achievement of the other children. An exception was observed in science, relative to which the presence of the gifted did have a favorable effect on the achievement of other pupils. A similar but less general exception was observed in social studies. Broad-range classes generally did show slightly greater achievement increments than did the narrow-range classes.

Differences among classes in achievement level were perhaps more noteworthy than were differences associated with grouping patterns. A few teachers seemed to be extraordinarily successful in all subject areas, and others generally unsuccessful. But more often it appeared that teachers succeeded in one or two subjects, but did not do so well in others. Unevenness of teacher success among subject areas was especially evident in achievement increments shown by gifted pupils.

These findings led the researchers to the interesting hypothesis that most elementary teachers might have greater ability to teach one or a few subjects to pupils of widely ranging ability than to teach in all subjects in homogeneous groups. These investigators concluded that their study cast doubt on the value of ability grouping per se.

For a number of reasons this extensive study is likely to be greatly influential. Researchers will want to examine all details of design of the study. Hopefully, an early and complete report of the study will be pub-

lished, since interim reports of bare conclusions are now available. However, these preliminary publications permit no detailed scrutiny. One major criticism of this research effort was the failure to influence, or even to investigate, modifications of classroom procedures to meet individual needs within ability-grouped classes. Since it is the purpose of ability grouping to permit changes in instructional procedures, it may not be defensible to do so extensive an investigation without attention to the instructional variable.

The findings reported by Passow and Goldberg (1962) served to focus increased interest on the Dual Progress Plan for elementary education (Stoddard, 1961). This plan for major reorganization of elementary education, which involves specialist teachers in the fields of science, mathematics, art, music, and foreign languages, sets the stage for differentiation introduction. The placement of children for one-half of the school day in ungraded, ability-grouped sections for the subjects enumerated makes possible maximizing the educational challenge for gifted children. During the other half of the day, pupils are placed in a graded program with a "home teacher" for social studies, reading, and other language studies. The plan has been in operation in elementary schools of Ossining, New York, since the fall of 1958 and in Long Beach, New York, since February 1959. Stoddard has presented a carefully reasoned rationale for the program. Over-all evaluation of the program presents many difficulties. Only preliminary and tentative results are now available. A number of studies in areas of curriculum development, measurement, grouping, and other topics have been planned.

Another study of high significance on ability grouping has been reported by Drews (1959). The study was conducted in ninth grade English classes of four junior high schools in Lansing, Michigan. On the basis of language and reading test scores, high, average, and low ability experimental classes were chosen. Control classes were formed that included students representing the full range of abilities as measured by the tests. Each teacher included in the study taught both a control class and one or more experimental classes. The design of the study which provided for balancing the effects of teacher-experience with homogeneous classes covered one year. A definite effort had been made before the experimental period to plan a differentiated program according to pupil abilities.

Analysis of pretests and posttests of achievement showed no advantages for ability grouping. However, teachers and students generally reported favorable views of ability-grouped classes. Low-ability pupils participated more actively in classroom activities and reported more interest in school and higher confidence in their own ability to learn when they were in experimental instead of the control classes. The complicated problem of the criterion emerged again in this study; moreover the results could not be said to speak unequivocally for homogeneous classes in English.

Additional References: Ekstrom (1961); French (1960); Kincaid and Epley (1960).

Acceleration

Reviews of research on acceleration have been presented by Anderson (1961) and by Thompson and Meyer (1961). A bulletin edited by Reynolds (1962) provided a comprehensive review of research on early admission to school for gifted children and also described practical features of programs which have been in operation for many years.

Weiss (1962) reported an experimental study of 35 selected early-age kindergarten children as compared with 161 normal-age kindergarten entrants. The two groups were equated on IQ and personality adjustment. Assessment procedures for personality were crude at best. Results on the *California Test of Personality*, a sociometric scale, and a teacher rating scale showed that at the end of the kindergarten year early-entering children exhibited levels of achievement and adjustment approximately at the class average. The author inferred that the early-age bright children might have achieved at a higher level if they had waited to enter school in the normal pattern. More group recognition was afforded to older children of normal and above average intelligence than to the bright ones entering early.

Longitudinal studies summarized by Anderson (1961) and by Reynolds (1962) showed that the pattern of group recognition noted by Weiss at the end of kindergarten changed in a favorable direction for early admitted children, and that their achievement and adjustment levels continued to accelerate in later grades. Additional longitudinal studies should be done to settle the important questions raised by Weiss regarding interest, goal-setting, and motivation.

Pressey (1962) provided information on the age at which recent graduate students had completed the doctorate in a number of fields. As compared with data which Pressey had assembled for earlier dates, students tended to be older when completing their studies. It remained true that men who were most prominent in their fields were likely to earn their doctorates early.

Additional References: Chapman (1961); Faries and Perry (1960); Lehman (1960).

Curriculum Studies

There has been, on the whole, very little work described in the literature on curriculum which could be classified as research, as field testing, or as demonstration with built-in evaluation devices. This has been a serious limitation, especially at a time when much informal experimentation has been taking place in the curriculum at all levels, from nursery through graduate school. It is to be hoped that the important, imaginative curricular adaptations which have characterized much of the current exploratory work with the gifted, creative, and talented students can be so planned that it will be possible to make meaningful comparisons of these adaptations both with the conventional curriculums and with the newer curriculums.

General Developments

Major Books

A number of new books and revised editions have been published since 1959. Those that presented theoretical formulations and new research, synthesized research, described field testing or demonstrations, or called substantially upon research to support their theses are mentioned below.

Fliegler (1961) contributed to and edited a work on curriculum planning and development for the gifted. Freehill (1961) prepared a survey text including elements of the education and psychology of the gifted. DeHaan and Havighurst (1961) presented a revision of their earlier book on the education of the gifted—a book in which the chapter concerned with creativity was particularly noteworthy. In a refreshing approach, Ward (1961) stated fundamental assumptions and deduced a series of propositions which represent a most useful and evocative formulation of the practice of education for the gifted on a sound theoretical base.

The U.S. Department of Health, Education, and Welfare, Office of Education, Cooperative Research Branch (1960), issued a group of research papers concerning gifted elementary and secondary school students—contributions by persons with major responsibility for specific projects.

Prepared by a national committee, a publication of the Council of Chief State School Officers (1962) constituted a most significant policy statement regarding practice and research. Although having the broad purposes of furnishing guidelines and opportunities for leadership at the level of state education agencies, the brief statement emphasized experimentation in the scientific sense, evaluation, and other systematic approaches which either clearly specified or implied research.

Needed Research

Abraham (1959) called for research in (a) family relationships, (b) flexible school entry and advancement, (c) school and community attitudes, and (d) work and play relationships. It is evident that some research has been going on, particularly with respect to the second stated area and, to a lesser extent, to the third. Justman (1960) also pointed out many of the same needs as well as several others.

Gowan (1960) commented on the present status of research on the able with particular reference to the audience to which research findings are directed. Teachers, in his view, need information on the application of research to instructional use and to in-service training in order to change attitudes, while administrators seek evaluative and comparative studies on effectiveness of educational procedures. Gowan also recommended ways of organizing research findings for action.

The Cooperative Research Branch of the Office of Education, U.S. Department of Health, Education, and Welfare, through financing field-trial and demonstration research and through holding conferences, has made important progress toward moving research information from the pages of the technical reports into the classrooms of the nation. Nevertheless, the research needs pointed out in the December 1959 REVIEW have not been fully met. Rather, they have been sharpened and intensified. The trends in current research are still essentially the same ones, with relatively minor changes in emphasis.

It is probably too much to expect, even in our swift-paced culture, that national trends in a major phase of education would change markedly during a six-year period otherwise unmarked by major disaster or social upheaval. It is also probably unreasonable to expect the resolution of complex human problems through research in the behavioral sciences during even a 10-year period. Rather, the fact that certain progress, several new insights, and some improved communication can be observed should be looked upon with favor. Through continued effort, specific problems which are now seen can be solved. Other manifestations of persistent problem areas not yet grasped or named will hopefully become apparent as current issues and questions are resolved.

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